



Docket D-7211(1156)

CLAIMS (PREVIOUSLY AMENDED)
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FEB 05 2002

GROUP 3000

Sub 1
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1. A device for providing buoyant support comprising a member defining a cavity and a body disposed within said cavity, said cavity being adapted to contain a liquid and to have walls that generally conform horizontally in their shaping to the shape of said body to be received in said cavity and immersed in the liquid, said cavity being of a size that causes said walls to be closely spaced to side surfaces of said body so that the contained liquid exerts an upward buoyant force on said immersed body that is greater than the weight of the liquid that said body displaces within said cavity, said walls of the said cavity extending vertically to a height at least equal to the height which is reached by the said liquid when said body is immersed in said liquid within said cavity.

Sub 2
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5. A device for providing buoyancy support comprising a cavity formed in said device, said cavity being adapted to contain and confine a liquid, said cavity walls generally conforming in their shaping to shaping of a body to be received and immersed in a liquid disposable in said cavity, said cavity being of a size that confines space about a body so that a liquid in said cavity rises rapidly about a body, relative to its descent, and immerses a body with displacement of a lesser weight of liquid whereby an upward buoyant force is exerted upon an immersed body substantially equal to a greater weight of liquid that would be displaced by immersion of a body to the same extent in a liquid under unconfined conditions, said walls of said cavity extending upwards to a height that is at least equal to that reached by the said liquid when said a body is immersed in said liquid within said cavity.

Sub 3
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15. A combination to generate buoyant force, and to demonstrate the principles of its generation, said combination comprising a body, a liquid and a member defining a cavity, said cavity being adapted to contain both said liquid and said body, said cavity having walls that closely conform to a shape of said body and which are closely spaced from said body when said body is placed in said cavity, said combination causing the body to displace [displacing] a volume of liquid within said cavity that is less than an immersed volume of said body whereby a buoyant force is exerted on said body that exceeds the weight of said volume of liquid, said walls rising vertically to a height that at least equals the height reached by the said liquid when said body is immersed in said liquid within said cavity.